

Claims

1) A trailer for transporting live poultry hatchlings comprising:

a) a cargo space comprising a front, a rear, a floor, a ceiling, and two side walls, the cargo space for containing a plurality of perforated hatchling containers stacked to create a central passage along a length of the trailer;

b) a blower means at the front of the trailer for blowing air along the length of the trailer through the central passage;

c) a side duct along each side wall, each side duct permitting a flow of air along the length of the trailer through a cross-sectional area of the side duct; and,

d) each side wall having apertures therein spaced apart along the length of the trailer for admitting air into the side duct from the central passage, thereby creating a transverse flow of air through the hatchling containers, the transverse flow of air being similar at all positions along the length of the trailer.

2) The trailer of claim 1, wherein the cross-sectional area of the side duct decreases towards the rear of the trailer.

3) The trailer of claim 1, wherein the cross-sectional area of the side duct decreases in discrete steps towards the rear of the trailer.

4) The trailer of claim 1, wherein the cargo space has a cross-sectional that decreases towards the rear of the trailer.

5) The trailer of claim 1, wherein the ceiling is downwardly tapered towards the rear of the trailer.

6) The trailer of claim 1, wherein the apertures increase in size towards the rear of the trailer.

7) The trailer of claim 1, wherein the spacing between adjacent apertures decreases towards the rear of the trailer.

8) The trailer of claim 3, wherein the ceiling is downwardly tapered towards the rear of the trailer, wherein the apertures increase in size towards the rear of the trailer, and

wherein the spacing between adjacent apertures decreases towards the rear of the trailer

5 9) The trailer of claim 1, wherein the floor comprises a plurality of carts, each cart mobile along the length of the trailer and comprising a platform with a set of wheels mounted thereunder, the platform for supporting a plurality of stacked hatchling containers, each platform abutting an adjacent platform along the length of the trailer, the platforms creating a continuous surface within the cargo space.

10) The trailer of claim 9, wherein the platforms are non-perforated.

11) A method for transporting live poultry hatchlings in a trailer comprising:

- 10 a) providing a plurality of perforated containers for housing the hatchlings;
- b) stacking the plurality of containers within a cargo space of the trailer and forming an open central passage along a length of the trailer with the stacked containers;
- 15 c) introducing air into the central passage and collecting the air in a side duct on each side of the trailer, thereby creating a transverse flow of air through the stacked containers; and,
- d) distributing the air so that a similar transverse flow of air is provided at all points along the length of the trailer.

12) The method of claim 11, wherein the air is distributed by creating a pressure difference between the cargo space and the side ducts.

20 13) A method for ventilating a cargo space of a trailer for transporting live poultry hatchlings, the method comprising the steps of:

- a) admitting a flow of air into the cargo space, the cargo space having a first end, a second end, a ceiling, a floor, and two side walls;
- b) directing the flow of air from the first end to the second end of the cargo space through a passage in the cargo space;
- 25 c) splitting the flow of air into a plurality of transverse air flows that flow through hatchling containers in the cargo space, the plurality of transverse air flows being similar at all positions along the length of the trailer; and,

d) admitting the plurality of transverse air flows into a side duct along a side wall of the cargo space.

14)The method of claim 13, wherein the passage is a central passage and wherein there is a side duct along each side wall.

5 15)The method of claim 14 wherein the flow of air through the central passage is split into the plurality of transverse air flows by a plurality of spaced apart apertures in the side walls permitting fluid communication between the cargo space and the side ducts.

16)The method of claim 15, wherein the spacing between the apertures in the side walls decreases towards the second end of the cargo space.

10 17)The method of claim 15, wherein the apertures in the side walls increase in size towards the second end of the cargo space.

18)The method of claim 14, wherein the side ducts have a greater cross-sectional area at the first end of the cargo space than at the second end.

15 19)The method of claim 14, wherein the cargo space has a greater cross-sectional area at the first end than at the second end.

20)The method of claim 13, wherein the first end is a front end of the trailer and the second end is a rear end of the trailer.